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RESEARCH ARTICLE

PUBLIC PERCEPTION OF CHALLENGES AND SOLUTIONS OF TRAFFIC MANAGEMENT OF  
COMMERCIAL MOTORCYCLES IN UASIN GISHU COUNTY, KENYA

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ABSTRACT

The purpose of this study was to investigate perceived challenges and solutions in traffic management strategies of commercial motorcycles in Uasin Gishu County in Kenya. This was in light of concern of continuous reports of disorderliness and increased cases of accidents involving commercial motorcycles. Two research questions guided this study; what challenges were perceived in traffic management of commercial motorcycles and what perceived solutions would assist in the traffic management of commercial motorcycles. A Survey was conducted on 200 passengers, 60 motorcyclists and 4 government officials. A questionnaire was used for data collection. Data was analyzed using descriptive statistics. The study established that informal training of motorcyclists (75%), drunk cycling (66.2%) and lack of specific rules and regulation for commercial motorcycles (64.2%) were perceived as the main challenges. Perceived solutions included; introduction of alcohol blow gadget to test for alcohol toxicity (83.1%), training on safety measures (77.3%) and refining of traffic rules and regulation (75.3%). The study recommended training of motorcyclists, toxicity tests and refined traffic rules could reduce disorderliness of commercial motorcycles and related accidents.

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INTRODUCTION

Commercial motorcycle business refers to the use of motorcycles to generate income (Kumar, 2011). Motorcycles that are used for commercial transport have increasingly become popular in Africa (Nandwoli, 2014). During the period around 1960s, motorcycles were used for private transport with few of them being used for commercial business transport. Commercial motorcycles were used for smuggling of goods across the Kenya-Uganda border (Naddumba, 2006). It was from the transport business of crossing the border between Kenya and Uganda that the name bodaboda (border-border) was coined to refer to commercial motorcycles in Kenya and East Africa region (Howe, 2004). The origin and the growth of the use of motorcycles for commercial purposes can be traced fundamentally to the collapse of the Kenya bus transport services. The other reason could have been the de-regulation of the transport market. The two factors involving transport led to the growth of informal sector in transport operations such as the use of commercial motorcycles (Kumar, 2011). The popularity of motorcycles mode of transport worldwide was also attributed to low initial cost of acquiring a motorcycle and

good fuel efficiency (Motor Cycle Safety, 1999). According to Ministry of Transport (2009), the number of registered motorcycles in Kenya increased from 4,136 in 2005 to 91,151 by 2009. This was a huge increase in just a period of four years. The increase in the use of motorcycles for commercial purposes has resulted to significant increase in self-employment. Many people find jobs as motorcycles mechanics, riders, owners, spare part vendors, motorcycles registration in licensing offices and insurance offices among others (Nandwoli, 2014). The motorcycles business significantly attracted more people when the Government of Kenya reduced the import duty on motorcycles in 2012. It was a deliberate move as an economic recovery strategy policy in Kenya.

This policy was aimed at creating more jobs to the youths and increased mobility consequently leading to economic growth (Government of Kenya, 2012). The growth of commercial motorcycles could also be attributed to rapid growth of urban population, inadequate and deteriorating roadworthy infrastructure, poor facilities for non-motorized transport and inadequate formal public transport (Javid, Okamura, Nakamura & Wang, 2013). According to a study conducted by Kumar (2011), the popularity of motorcycles as a mode of transport in developing countries became common due to its advantages

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which included easy of maneuverability, ability to travel on poor roads and demand responsiveness. In some African countries the use of motorcycles for commercial purposes has been influenced by growth of organized societies. For example in Lagos the Nigerian Auto bike Commercial Owners and Workers Association (NACOWA) is the dominant union with 57 branches and around 200,000 members in Nigeria (Ayinla, Gboyega, Ebijuwa, Olesegun, and Akinola, 2012). In Kampala Uganda, the National Federation for BodaBoda Operators (NEFABO) has more than 30 branches and 70,000 members spread in major towns (Kumar, 2011).

They use their numerical strength to influence policy decisions and even enforcement of traffic rules amongst its member. A study conducted by Dinye (2013), also established that there was high ownership and use of motorcycles in Ghana Africa. The study also noted that motorcycle business had improved the living standards of residents in urban areas. Literature reviewed indicated that the growth of commercial motorcycles in Kenya has been caused by decline in the organized public transport systems (Kumar 2011 & Ayinla *et al.*, 2012). The decline led to a growth of unregulated informal and non-conventional public transport systems. The growth of commercial motorcycles business in Eldoret municipality has been caused by high population of unemployed youths. Lack of employment has made more youths to considered commercial motorcycle business as alternative source of employment (Sisimwo, Bii and Mwaniki, 2012). The researcher preferred the study area because it has a total of 30 registered self-help commercial motorcycles groups with a capacity of around 600 motorcyclists and a high population of motorcycle passengers (Department of Social Works, Uasin Gishu County, 2014).

### Problem Statement

A report was given where commercial motorcyclists engaged police in running battles and paralyzed traffic operations in Eldoret town. The demonstrators complained about harassment by municipal Askaris (Barnabas, 2013). Another report by Musembi and Kakar (2013) reported that the public had a peaceful demonstration to the Eldoret West District Commissioner and complained about increased accidents involving commercial motorcycle in Eldoret town. Under The traffic Amendment Rules, 2009 and the transport licensing act (TLB), the Government of Kenya manages traffic of commercial motorcycles by use of the police and the Transport Licensing Board of Kenya (Ministry of Transport, 2009).

Although there has been increase in the number of commercial motorcycles in Kenya, the National Transport and Safety Authority (NTSA) had not yet developed uniform traffic management strategies for commercial motorcycles in urban settings (Nandwoli, 2014). Eldoret municipality had developed its own traffic by-laws to assist in the management of commercial motorcycles. Commercial motorcyclists have also in some areas organized themselves in associations. These associations usually develop strategies to regulate themselves with clear "in house" traffic rules (Sisimwo *et al.*, 2013). In spite of these operating strategies, there had been reports of increased number of accidents involving commercial

motorcycles. For example Kimonye (2012) reported that motorcycles had killed 286 pedestrians and 166 riders in year 2011 (Ministry of Transport, 2012). Studies by (Kumar, 2011; Mogaka, Omollo & Oundo, 2011; Mbugua, 2011; Githui, Nakumura & Okumura 2011; Olowokudejo & Aduloju, 2011; Sisimwo *et al.*, 2013 and Nandwoli, 2014) were conducted outside Eldoret on different aspects of commercial motorcycles, using different variables and research methods. Thus this study investigated perceived challenges and perceived solutions of traffic management strategies' of commercial motorcycles transport business in Uasin Gishu County in Kenya. The researchers anticipated that the study would provide information that could be useful to Government officials and the public in general on traffic management strategies. The findings of the study would also shed light on the status of the issues involved in management strategies of commercial motorcycle business.

### Research Questions

- What challenges were perceived on traffic management strategies of commercial motorcycles in Uasin Gishu County?
- What perceived strategies would assist traffic management of commercial motorcycles in Uasin Gishu County?

### METHODS AND MATERIALS

The study adopted survey research design because it enabled collection of large amount of data in a short time. The study targeted all persons living in Eldoret municipality. Eldoret municipality has a population of about 900,000 persons who could be involved in commercial motorcycle business. Multistage and simple random sampling techniques were adopted to select a sample of 200 motorcycles passengers and 60 commercial motorcyclists. Census was used to select 4 government officials. Data were collected by the use of questionnaire and interview schedule. Data was analyzed using SPSS version 21 and presented in form of tables.

### RESULTS

#### Perceived Challenges on Traffic Management of Commercial Motorcycles

While commercial motorcycles business is the most successful form of sustainable transport in the developing world, traffic management strategies is a major challenge. The study investigated perceived challenges and the results were presented in Table 1.0

The findings indicated that lack of proper training (73.8%), some commercial motorcycles not having designated routes (68.8%), drunken driving (66.2%), lack of specific traffic rule and regulation (64.2%), harassment from municipal askaris (63.8%) and traffic congestion (62.7%) were perceived as the main challenges in the management of commercial motorcycles.

The findings supported Kamara (2007) findings that indicated that commercial motorcycles led to congestion in major towns

in Liberia due to high influx of the business. The findings also supported (Minh, Sano and Moto, 2005) findings that established that the rapid increase of commercial motorcycle ownership was associated with poor traffic management strategies of the commercial motorcycles and also has contributed to increased traffic congestion in major towns.

motorcyclists training (65.4%) were perceived as the possible solutions to the management of commercial motorcycles.

### Conclusion and Recommendation

The study concluded that there was need to ensure formal training of the commercial motorcyclists;

**Table 1.0. Perceived Challenges on Traffic Management strategies Of Commercial Motorcycles**

Statement	Yes	No	Uncertain
Commercial motorcycles have led to congestion in town	163 62.7%	63 24.2%	34 13.1%
Most of the commercial motorcyclist have not attended proper training on driving motorcycles	192 73.8%	44 16.9%	24 9.2%
Commercial motorcycles are involved in frequent accidents	168 64.6%	45 17.3%	37 14.2%
There is no policy testing of alcohol toxicity of commercial motorcyclist	172 66.2%	49 18.8%	39 15%
Commercial motorcyclist are harassed by municipal askaris and traffic police	166 63.8%	54 20.8%	40 15.4%
Commercial motorcycles operate on muddy and unmaintained roads	131 50.4%	88 33.8%	41 15.8%
There are no specific traffic rules and regulation for commercial motorcycles	167 64.2%	54 20.8%	29 11.2%

**Table 1.1. Perceived strategies on the traffic management strategies of commercial motorcycles**

Statement	Yes	No	Uncertain
Public education initiates on matters of over speeding, overtaking and overloading	186 71.5%	50 19.2%	24 9.3%
Training on the safety measures (wearing helmet and reflector jackets)	201 77.3%	39 15%	20 7.7%
Refining traffic rules and regulations to cater for commercial motorcycles	194 75.3%	44 16.9%	22 8.5%
Regulation of working hour for the commercial motorcycles	177 68.1%	57 21.9%	25 9.6%
Introduction of a special unit in the police department to manage commercial motorcycles	191 73.5%	46 17.7%	23 8.8%
Development of a policy on alcohol toxicity test (alcohol blow)	216 83.1%	34 13.1%	10 3.8%
Reviewing the motorcyclist training curriculum	170 65.4%	76 29.2%	14 5.4%

In relation to poor training of commercial motorcyclists, the findings supported Mbugua's (2011), finding in Thika town in Kenya that indicated that most of the commercial motorcyclists attend training for few week while others were trained informally by their peers. Lack of proper training of the commercial motorcyclists was perceived as a major challenge since some do not even understand the traffic rules and regulation.

### Perceived Solution on the status of Traffic Management Strategies of Commercial Motorcycles

The study also investigated perceived solutions to the management strategies of commercial motorcycles. The results were presented in Table 1.1

The findings of the study indicated that introduction of alcohol blow gadget to test for alcohol toxicity (83.1%), training on safety measures (77.3%), refining of traffic rules and regulation to cater for commercial motorcycles (75.3%), establishment of special unit in police department and Municipal Askaris to manage commercial motorcycles (73.5%), public education initiates on matter of over-speeding, overtaking and overloading (71.5%) and reviewing of

them more conscious of the risks that they face and they cause Sensitization of traffic police on the harassment they emit on cyclists and road users and development of alcohol blow policy to help test on toxicity of the commercial motorcyclists. The study recommended that the motorcyclists, traffic police and municipal councils should work together to ensure that disorderliness and accidents cause by commercial motorcyclists are reduced.

### REFERENCES

- Ayinla, T.O., Ghoyega, A., Ebijuwa, A.S., 2012. Factors Affecting High Rate of Commercial Motorcycle Accidents In Nigeria. *American International Journal of Complementary Research*, Vol. 2 No. 11.
- Barnabas, L.D 2013. *Is Driver Training Contributions Enough Towards Road Safety?* Netherlands. Sage publishers.
- Dinye, R.D. 2013. *The significance and issues of motorcycle transport in the urban areas in northern Ghana. Scientific Journal of Review*,2(10),pp. 256-272.
- Githui, J.N., Okumura, T.; Nakamura, F. 2011. "The structure of users. Satisfaction on urban public transport services in developing countries. *The case of Nairobi*" *Journal of the*

- Eastern Asia Society for Transportation Studies*, 8, 1288-1300.
- Government of Kenya 2012. *Economic Survey*. Government printers. Nairobi.
- Howe, J. 2004. Bodaboda Uganda rural and urban low capacity transport services, Kampala. Makerere University.
- Javid, M.N., Okumura, T., Nakamura, F and Wang, R. 2013. *Comparison of Commuter Satisfaction and Preference With Public Transport*. A case of service in Lahare. Nigeria.
- Kumar, A. 2011. *Understanding the emerging role of motorcycles in African cities*, a political Economy perspective, 5, 200-221
- Mbugua, C. 2011. *The Effects of The Motorcycle Transport Revolution On The Economic Growth Of Kenya, A Case Study Of Thika District*. *Journal of Health Research*, Vol. 12 pp. 214-221
- Minh, C. C., Sano, K. and Moto, S. M. 2005. The speed flow and head way analysis of motorcycle traffic in Nigeria. *Journal of International Traffic Policy*. *Journal of the Eastern Asia Society for Transportation Studies*, 6, 1496 – 1508.
- Ministry of Transport 2009. *The National Youth Situation Analysis Report*. Government printers. Nairobi.
- Motorcycle safety 1999. *Motorcycle Related Road Traffic Crashes In Kenya Figures and Facts*. Government printers. Nairobi
- Musembi, C. and Kakar, D. 2013. *Increased Rate of Accidents In Eldoret*. Nairobi. Nation Media Group, Nairobi.
- Mwabobia, M. B. 2011. *Critical Success Factors in the Motorcycle Boda Boda Business in Nairobi, Kenya*. *Journal of Research and Sustainable Development* Vol. 4 pp. 188-121
- Naddumba, M.M., 2006. A Cross-Sectional Retrospective Study of BodaBoda Injuries at Mulago Hospital in Kampala-Uganda.
- Nandwoli, F. W. N, 2014. Factors influencing motorcycle transport on creation of employment opportunities in Kenya, a case study of Bungoma County. *Journal of Motorcycles Business*, 4, 140-150.
- Olowokudejo, F. and Aduloju, K. 2010. Perception of Parties To Third Party Motorcycle Insurance Policy In Lagos, Nigeria. *International Journal of Economic Development Research and Investment*, 5, 200-208
- Republic of Kenya, 2011. *Economic Survey*, Government Printer, Nairobi.
- Sisimwo, K.P., Mwaniki, K.P. and Bii, C. 2012. Crash Characteristic and Injury Patterns Among Commercial Motorcycle Users Attending Kitale Level IV District Hospital, Kenya. *The Pan African Medical journal* accessed online <http://www.panafrican-med-journal.com>

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